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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,537	12/19/2005	Takuzo Sano	OGW-0410	9370

7590 09/17/2008  
Patrick G. Burns-Greer, Burns & Crain, Ltd.  
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Chicago, IL 60606

EXAMINER
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SULTANA, NAHIDA

ART UNIT	PAPER NUMBER
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4151

MAIL DATE	DELIVERY MODE
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09/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/561,537	<b>Applicant(s)</b> SANO ET AL.	
	<b>Examiner</b> NAHIDA SULTANA	<b>Art Unit</b> 4151	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/19/2005</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10561537, filed on December 19<sup>th</sup>, 2005. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a certified English translation of the foreign application must be submitted in reply to this action. 37 CFR 41.154(b) and 41.202(e).

Failure to provide a certified translation may result in no benefit being accorded for the non-English application.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuramori et al. (US patent No. 6, 843, 286 B1) in view of Glinz et al. (US patent No. 6, 672, 349 B1).

Regarding claim 1, Kuramori et al. teach:

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A method of manufacturing a support body for run flat ("tire/wheel assembly, run flat support member and manufacturing method therefor"; see abstract), which comprises pressing a circumferential wall of a tubular blank between inner and outer molding rollers and rotating the inner and outer molding rollers to form at least one circumferentially continuous protruding part on the circumferential wall of the tubular blank to process the tubular blank into an annular shell ("a tire/wheel assembly in which a run flat support member 3 is inserted into a cavity of a pneumatic tire 2, the run flat support member 3 including a circular shell 4 in which the outer circumferential side thereof is used as a support surface and the inner circumferential side thereof is opened to have two leg portions, and an elastic rings 5 supporting the ends of the two leg portions on a rim 1"; abstract).

However, Kuramori et al. do not teach having inner molding roller having maximum outer diameter that is substantially the same as the diameter of the tubular blank. In the same field of art, vehicle wheel with a pneumatic tire, Glinz et al. have emergency support body mounted on the wheel rim and positioned inside the pneumatic tire ("In Fig. 1, an emergency support body 1, which is composed, in cross-section, of a ring torus 2 with a bowl-shaped cross-section and support elements 3 and 4. Ring Torus 2 may include two axially exterior sections (areas) 5 and 6 that are each contoured radially outwardly, i. e., with an curvature that is open (downwardly) to a wheel rim 7."; Column 8, Lines 17-24; "emergency support body" Figure 1, Item#1) for improved run-flat support member.

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Thus, it would have been obvious to one ordinary skill in the art at the time of the applicant's invention, to modify the roller of "method of making run flat support" of Kuramori et al. with structurally similar "emergency support body" of Glinz et al. and having roller having maximum outer diameter that is substantially the same as the diameter of the tubular blank, for the benefit solving vibration during rotational speed of the molding roller, and having higher productivity, and an improved run-flat member.

Regarding claims 2 and 6, Kuramori et al. do not teach: the method of manufacturing a support body for run flat, wherein the maximum outer diameter of the inner molding roller is in a range of 95% to 100% of the inner diameter of the tubular blank and wherein the maximum outer diameter of the inner molding roller is set to be as large as 95~ to 100~ of the inner diameter of the tubular blank.

In the same field of art, vehicle wheel with a pneumatic tire, Glinz et al. have emergency support body mounted on the wheel rim ("the disks of support elements 3 and 4 may be positioned or inclined at an angle  $\alpha$  to the rim axis, which may be between, e.g., approximately  $75^\circ$  and  $90^\circ$ , preferably approximately  $83^\circ$ . The disks may also be inclined toward an axial center of the rim" see Column 8, Lines 34-39). In this matter, Glinz et al. structures the support element where the emergency support body 1 is positioned so that during a puncture tired vehicle is able to travel long distance of kilometer. Thus, it would have been obvious to one ordinary skill in the art at the time of applicant's invention, to modify the roller of "method of making run flat support" of Kuamori et al. with structurally similar "emergency support body" of Glinz et al. and having inner molding roller in a range of 95% to 100% of the inner diameter of the

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tubular blank, for the benefit of solving as stated problem of vibration during rotational speed of the molding roller, and having higher productivity.

Regarding claim 3, Kuramori et al. teach:

A device for manufacturing a support body for run flat ("tire/wheel assembly, run flat support member and manufacturing method therefor"; see abstract) , which comprises inner and outer molding rollers to press the circumferential wall of a tubular blank between the inner and outer molding rollers that are rotated to form at least one circumferentially continuous protruding part on the circumferential wall of the tubular blank to process the tubular blank into an annular shell, wherein the maximum outer diameter of the inner molding roller is substantially the same as the inner diameter of the tubular blank ("In the present invention, a run-flat support member is formed as a circular member which is inserted into a cavity of a pneumatic tire. This run-flat support member is formed to have its diameter smaller than the inner diameter of the cavity of the pneumatic tire in order to maintain a certain distance from the inner surface of the cavity. The inner diameter of the run flat support member is formed to be approximately the same as the inner diameter of a bead"; Column 2, Lines 56-63). However, Kuramori et al. do not provide rollers having wherein the maximum outer diameter of the inner molding roller is substantially the same as the inner diameter of the tubular blank but in the same field of art, Glinz et al. 1, same emergency support for run-flat tires where the present applicant's modify the process of making it (see Figure 1, item 1).

Thus, it would have been obvious to one ordinary skill in the art at the time of applicant's invention to use rollers in the method of making support structure for run-flat

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tire of Kuramori et al. with having maximum outer diameter of inner molding roller to be same as inner diameter of the tubular blank, of Glinz et al. for the benefit of solving as stated problem of vibration during rotational speed of the molding roller, and having higher productivity.

Regarding claims 4 and 5, Kuramori et al. further teach: the device for manufacturing a support body for run flat, wherein the inner molding roller adopts a structure that allows the roller to be disassembled into a plurality of parts ("Examples of the bearing mechanism can be a ball bearing, roller bearing, and the like. Such a lubricant or bearing mechanism interposed there between provides smooth sliding of the cover plate on the run-flat support. Accordingly, it is possible to suppress not only wear of run-flat support and cover plate but also wear of the inner surface of the tire more effectively"; Column 1, Lines 46-55; Column 2, Lines 20-30); the device for manufacturing a support body for run flat according to claim 3, wherein the inner molding roller adopts a structure that allows the roller to shrink in a radial direction ("combination of shell segments made of material as above makes it possible to achieve the light weight run-flat support member and improved vibration characteristics thereof"; Column 4, Lines 1-7); "material and sized of run-flat" Column 3, Lines 55-65).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Glinz et al. (US patent No. 6, 463, 976 B1).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAHIDA SULTANA whose telephone number is (571)270-1925. The examiner can normally be reached on Mon- Fri 7:30 Am - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Ortiz can be reached on 517-270-1206. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NS

**/Angela Ortiz/**

**Supervisory Patent Examiner, Art Unit 4151**